The Issue of Mountaintop Removal Coal Mining in Appalachia

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 Southern Appalachia is a region that is known for its beautiful, delicate landscape, its steadfast blue-collar work force, and sadly the controversy of strip mining or “mountaintop removal”. Coal mining has been a large part of the culture, economy, and daily life of the society since the 1800s but it became more prominent as of the 1900s. The environmental damage from over a century of coal mining is colossal, but it has been poorly documented. Production has been on the decline in recent years, but that does not mean that the end of mining is close upon the horizon (STROBO, 2012).

In the days of yore, mining was done deep in mountains as what is known as shaft mining, but since the 1980s it has primarily turned to strip mining and now 70% of the nation’s mines are strip mines and in the Appalachian region, the type of strip mining that is being performed is something called mountain top removal. Mountain top removal is much more profitable and efficient as it has a higher yield with significantly less man power. But now, instead of labor disputes being in mining’s headlines, it is the environmental and human health dispute that is taking the spotlight.

 Mountaintop removal is using explosives full of ammonium nitrate to literally blow off the tops of mountains to reveal the thin coal seam within and then scraping the product out. (Rosner, 2014) When Jim Hecker, director of the Environmental Enforcement Project, was asked about mountaintop removal in a phone interview he said, “If you are looking for the greatest amount of environmental destruction caused by a single type of activity in the country today… mountaintop removal coal mining in Appalachia would almost certainly get the prize.” (Baller & Leor, 2007). Not only does this method destroy the mountains alone, but the byproduct of the blasting—which is overburden, the actual material that was the top of the mountain, or more colloquially called “valley fill” is just discarded into valleys burying and obstructing hundreds of miles of streams with the debris and affecting thousands of miles of water downstream. (Baller & Leor, 2007).

This valley fill causes rock slides, flooding, poisoning of the water supply, and health complications to the residents of the area. A prime example of the consequences of this disorganized dumping is Rock Creek, West Virginia. In Rock Creek, elementary school children often go home sick because of asthma problems, headaches, blisters in their mouths, and constant runny noses. Another sound case is in the town near Pine Mountain mine in Kentucky; children suffer from “alarmingly high rates” of diarrhea, vomiting, and shortness of breath; all of these symptoms can be traced back to sedimentation and dissolved minerals that have drained down from mine sites into the nearby streams. (Baller & Leor, 2007) .

Statistically speaking, West Virginia is the largest producer of the region, but it only produces about half of what Wyoming does, a state that uses both shaft mining and surface mining methods in a fashion like the Appalachian do. A large quantity of the fossil fuels actually come from Wyoming’s Powder River Basin. (B. Marley & Fox, 2015) Appalachian mines, however produce better, more valuable coal that has a lower sulfur content that burns slightly cleaner and that is why there has been such an increase in strip mining in the area. (Baller & Leor, 2007)

The economics and the health implications go hand in hand with the culture that has been created. According to Bell and Braun, mining has been around for over a century and the region was the first in the nation to mine coal a great deal of the culture deep in the heart of the hills is based upon the economic dynamic that is mining. Traditionally men worked in the mines and were the “bread winners” of the family and women took care of the household and did other “womanly duties”. Because the culture is so set in this mindset, it is interesting to see the more prominent advocates from the area to find a better solution are actually women. (Bell & Braun, 2010).

Culture norms aside, the act of mountain top removal is causing some serious issues with the health of the population and the environment of the region as a whole. It has affected a total of 1.4 million acres of land and hundreds of thousands of human beings directly on a daily basis. The argument presented here is whether or not the practice mountain top removal should be ended once and for all in Appalachia. With the evidence of environmental damages, health risks, and impending economic doom this is an activity that needs to have a solution that ends the practice altogether.

Mining is a large part of the economy and supplies the nation’s power grid very substantially. The trade employs a sizeable amount of the population and creates even more jobs in different places of the economy. To put this in perspective, the region is home to only about 7.95% of the total population of the United States, but two-thirds of the entire nation’s coal miners come from this area. (STROBO, 2012). To minimize and try to end this industry would put a large amount of people in the region out of work and impose a strain on the nation’s power supply. Also, a proposal to end this type of mining would have to include plans to replace jobs in the region and have a big enough renewable energy resource to step in to its place. Maybe creating clean energy in the area could provide jobs, but as of now there is no other source that is readily available that would create that much energy.

Shaft mining simply cannot keep up and fulfill the nation’s power needs. Mountaintop removal and strip mining works faster, uses less manpower therefore increasing the profit margin, and has a much higher yield. Without it, a good portion of the nation would be struggling to find power since 35% of all coal produced in the United States comes from her and 15% of the nation’s total electricity comes from this source. (Strobo, 2012)

Residents also make the argument that they can take the environmental and personal health sufferings because they live in “an energy sacrifice zone” in order to assist the rest of the nation for what they think is the greater good. (Bell & Braun, 2010). So even though that there is a large amount of suffering related to health going on, people seem to think it is okay to make that sacrifice for what they think is the greater good of everyone else in the nation. Since an apparently sizable amount of people have no problem with this, one could agree that the health of only 7% might not be too much of an issue if fixing that could hinder more than 30% of the nation getting what they need.

In order to get rid of the dependency on fossil fuels, there needs to be a backup plan, and as of now there is not one. The nation has long been at a stalemate over this issue and has numerous other issues of similar fashion that have yet to be solved because of how the government operates. Even though there has been better environmental policies and organizations created in the government, there has been an overall stalemate over the last few decades in solid legislation to really control pollution from the practices of mining and in trying to move forward from the use of fossil fuels.(Surber & Simonton, 2017) The nation is just so dependent on the energy that coal produces, the government just wants to keep using what has been working and until this attitude changes, nothing can be done about the monstrosity that is mountain top removal.

Despite all of the economic and cultural dependence on the coal mines of the region, mountaintop removal’s long-term effect definitely outweighs the short-term benefits that people seeking to keep mountain top removal around. “This form of coal extraction has had consequences for Central Appalachia that reach far beyond declining employment opportunities…” (Bell & Braun, 2010). The first portion of this paper summaries the particularly severe health complications that people of this region suffer from and those kinds of issues are not what a person living in a country as highly developed as the United States of America should have to deal with. Even though there are policies like the Environmental Protection Agency’s Clean Water Act and the Surface Mining Control and Reclamation Act that is supposed to watch over all mountain top removal project. But mining operations sometimes overlook these policies and permits and go on with ill-disposed valley fill that wreak all of this havoc on the population and that is unacceptable.

Also, the mines have a negative association on the local economy. The argument that the industry provides jobs and is the foundation of the local economies is only true to a certain extent. When mountain top removal became the primary method of mining in the 1990s, the industry lost 10,000 jobs. The mass loss of jobs is due to the fact that so much machinery used with this process, that there is less need for brute man power. The counties that have endured the most severe strip mining and mountain top removal are the most distressed and the poorest of the region. In 1964 when President Lyndon Johnson stood on a coal miners porch and declared the War on Poverty, the poverty rate in the central and southern Appalachian region was 30% and as of the late 2000s the poverty rate has remained the same. (Baller & Leor, 2007).

Finding clean renewable resources like wind and hydro-power has a very high potential to not only replace the energy source of coal itself, but it could possibly create mountains of jobs. To make it easier to have a replacement for the cheap energy created by coal there is a lot that can be done in the department of using energy smarter and being more conservative with it. The Appalachian Regional Commission found that Appalachians, along with the other people in the nation almost haphazardly use energy. A disproportional amount of electricity and other energy outlets are being used by the population and they project the consumption to increase by 28% by 2030; they also project that the prices of energy will increase as well. Renewable sources such as wind and hydro power are more expensive at the moment anyway, so the first solution is to create a more energy efficient society to transition coal out. The Regional Commission estimates that a conceivable 60,000 jobs could be created over the next 10 years with the appropriate investments towards better energy efficiency. (Strobo, 2012).

Coal cannot last forever, it is a finite resource. As Marley noted, “The lack of versatility of coal along with its high carbon content makes it highly problematic for long-term use compared to other energy sources.” (B. J. Marley, 2016). All fossil fuels are a finite resource. In order for the world to continue to create energy and support a continuing exponentially growing population there has to be other energy sources created from renewable, sustainable resources. And the question is, why not start the first serious steps with this region? It is the only place in the United States to practice this extremely destructive type of mining and ending the practice would bode very well for the overall health and happiness for the region. It could also hopefully kick start a global movement to live more sustainably.

This campaign to end mountain top removal in Appalachia is an environmental justice movement. Environmental justice movements are more than just environmental movements; they do not just focus on the preservation of nature itself. These justice movements also focus on the principle of fairness on behalf people whose lives are centered in the most polluted environments in the world.

There is a new advantage to the fight today and that is social media. Photos of the devastation circulating to the general public are powerful for a couple reasons. For one, the mountaintop mines are not visible to the public—they are usually hidden away from roadways so the only way to actually see them are satellite images or from a small plane. Another reason that images are so important is because the destruction is just so visually stunning. The destroyed mountains, the buried streams, the devastated forests are all so shocking that “the story sells itself” and more and more people are getting emotionally involved because nobody believes that such environmental tragedy could happen in the United States. (Baller & Leor, 2007).

With everything put together it is clear that it is time for a fresh revolution on energy and consumption in America, and the only way to implement a change is to get the population caring about the health and well-being of not only the people of the nation, but the environment as well. As Harry Caudill said in 1962, “Coal has always cursed the land in which it lies… The curse of coal is a crown of sorrow.” (Marley, 2016) The earth cannot sustain the use of fossil fuels much longer and the new business of mountaintop removal does not help either. To end this practice in the Appalachian Mountains would be a big step in the journey to create a more sustainable and healthier society.

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